

Claim

1. Method for producing a cam for a clutch, wherein

- the cam (6) is formed in segments and has a cylindrical outer surface (13), a cylindrical inner surface (14), two lateral conical surfaces (15) and the two end faces (16, 17), with a cam journal (18) disposed on the cylindrical outer surface (13) of the cam (6), and
- the inner surface (14), the two conical surfaces (15) and/or the two end faces (16, 17) of the cam (6) are milled,

characterized in that the cam (6)

- is formed in a first process step so that the cylindrical outer surface (13) has its nominal finished size and the cam journal (18) has an excess length,
- is mechanically machined in a second process step, wherein the cylindrical outer surface (13) of the cam (6) is received and clamped in a clamping device for milling the cylindrical inner surface (14), the two lateral conical surfaces (15) and the two end faces (16, 17), and
- the excess length of the cam journal (18") is turned off in a lathe.

2. Method according to claim 1,

characterized in that forming the cam (6) comprises prototyping or reshaping performed by a cold or warm process.

3. Method according to claim 2,

characterized in that the cam (6) is soft-annealed after forming, and that the cylindrical outer surface (13) of the cam (6) is phosphatized and calibrated.

4. Method according to claim 1,

characterized in that a threaded bore (20) is formed in the excess length region of the cam journal (18'), and that the threaded bore (20) is used for clamping the cam (6').

5. Device for milling the contour surfaces of the cam, comprising a clamping vise (21) which clamps the cam (6') without covering the contour surfaces to be milled,

characterized in that the clamping vise (21) is configured for clamping a cam tensioning bar (22) and the cam tensioning bar (22) has at least one receiving V-block (23) for the cylindrical outer surface (13) of the cam (6') and a clamping device for the cam (6').

6. Device according to claim 5,

characterized in that the clamping device for the cam (6') comprises a through bore (24) in the cam tensioning bar (22) disposed in a region of the receiving V-block (23), and a tensioning screw (25) for the threaded bore (20) of the cam (6').

7. Device for shortening of the cam journal,

characterized in that the device comprises a sleeve-like clamping element (26) with at least one radial opening (28) and a clamping sleeve (29) with a clamping mandrel (30), wherein the outside diameter and the inside diameter of the cylindrical clamping element (26) correspond to the outside diameter and the inside diameter of the outer swivel element (1) of the clutch, the radial opening (28) is designed for receiving the cam journal (18"), and the clamping mandrel (30) and the clamping sleeve (29) match the cylindrical inner surface (14) of the cam (6').

8. Device according to claim 7,

characterized in that the sleeve-like clamping element (26) comprises a stepped through bore (27) with a radial shoulder, and the shoulder of the through bore (27) is configured as an axial limit stop for the cam (6').